FIG. 1

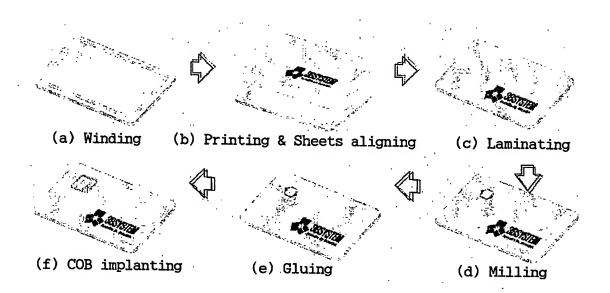


FIG. 2

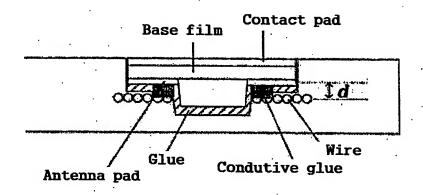


FIG. 3

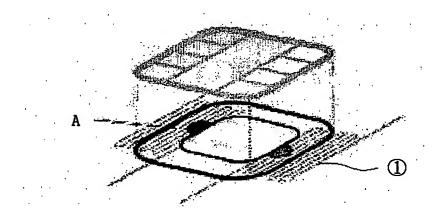
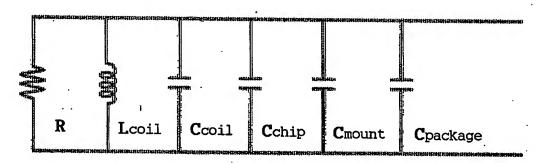


FIG. 4a

$$C_{mount} = \varepsilon_o \varepsilon_r \frac{A}{d}$$
 (Eq.1)

$$f_0 = \frac{1}{2\pi\sqrt{L_{coil}(C_{chip} + C_{coil} + C_{mount} + C_{vackage})}}$$
 (Eq.2)

FIG. 4b



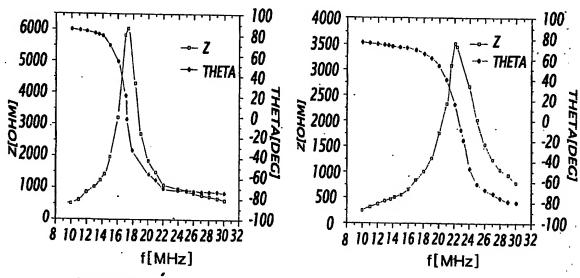
EQUIVALENT CIRCUIT OF THE CONVENTIONAL SMART CARD OF A COMBINATION TYPE

FIG. 5a

MEASUREMENT VALUE(AVERAGE)	·⊿đ	f _o	D
BEFORE TESTING	0	17.3MHz	80mm
. AFTER TESTING	9 <i>µ</i> m	22.8MHz	62mm

TABLE FOR RESULT MEASURED BEFORE AND AFTER A BENDING TEST

FIG. 5b



(a) BEFORE TESTING
(b) AFTER TESTING
GRAPH OF IMPEDANCE-FREQUENCY CHARACTERISTICS IN
THE CONVENTION SMART CARD OF A COMBINATION TYPE

FIG. 6

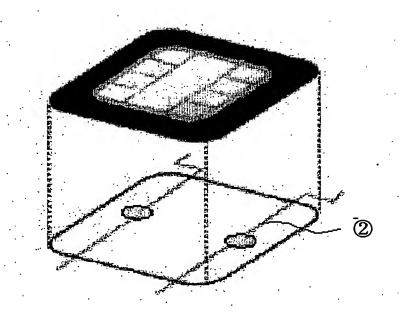
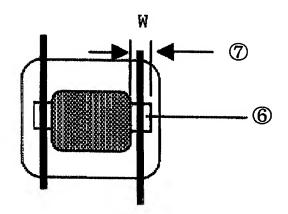


FIG. 7



ONE EMBODIMENT OF CONTACT PORTIONS BETWEEN A COB AND ENDS OF AN ANTENNA IN A SMART CARD OF A COMBINATION TYPE ACCORDING TO THE PRESENT INVENTION

FIG. 8

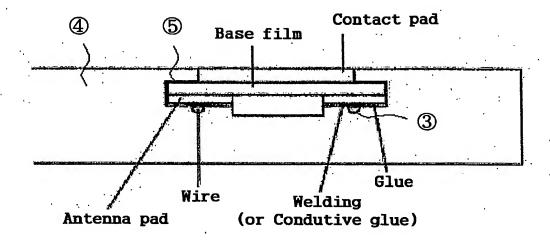
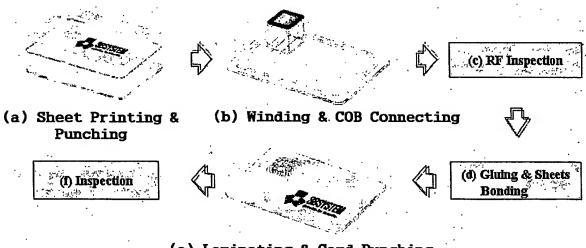


FIG. 9



(e) Laminating & Card Punching